PRESCRIBED FOCUS AREAS

Teaching the Prescribed Focus Areas (PFAs)

PFAs—breaking down the question

The structure of the biology syllabus is organised so that while the content of the course is taught within a contextual framework of modules, the Prescribed Focus Areas (PFAs) give an over-arching flavour and meaning to the study of the subject.

The five broad PFAs are:

- *history of biology*
- *nature and practice of biology*
- *applications and uses of biology*
- *implications of biology for society and the environment*
- *current issues, research and developments in biology.*

The PFAs are found embedded throughout the syllabus within numerous dot points. Each PFA must be directly addressed in teaching programs, with some modules being more suitable to certain PFAs than others.

While the Higher School Certificate examination emphasises the content of the syllabus, it is found that every year, questions with a different nature target the PFAs. Having a teaching program which draws on all the PFAs at appropriate points in the teaching sequence will assist bringing this aspect of the Biology course to the attention of the students.

Characteristics of the five Biology PFAs

- *History of biology:*
  —applies to the thinking and to the knowledge at that time in the past
  —should be addressed using terminology appropriate to the time
  —gives us an insight into the use of the Scientific Method in the past
  —allows us to gain an appreciation of the importance and significance of the work done in the past
  —gives us an insight into how general thinking in society has changed over time
- *Nature and practice of biology:*
  —is tentative (i.e. information is not fixed but in a state of flux)
  —is empirical (based on the scientific method—research, experimentation and observation)
  —involves hypothesising, theories and models
  —may show bias (e.g. cultural, religious and/or gender specific)
  —shows how the constraints brought about by limitations in technology in the pursuit of further knowledge often lead to developments and advancements in that technology

- *Applications and uses of biology:*
  —can be very contemporary, involving the latest discoveries
  —may also have a strong historical emphasis
  —usually highlights the strong link between research and implementation, especially in fields such as health and genetics
- *Implications of biology for society and the environment:*
  —has a strong overlap with the previous PFA
  —includes ethical considerations and contentious issues
  —requires a knowledge of biology sufficient to make predictions
  —also may require a good depth of general and background knowledge (i.e. wider reading)
- *Current issues, research and developments in biology:*
  —is constantly changing, drawing on recent and current events in biology
  —requires reading of newspapers and popular science magazines (e.g. *New Scientist*)
  —subscribing to local research organisations is beneficial
  —also involves ethical and technical aspects of biological issues.